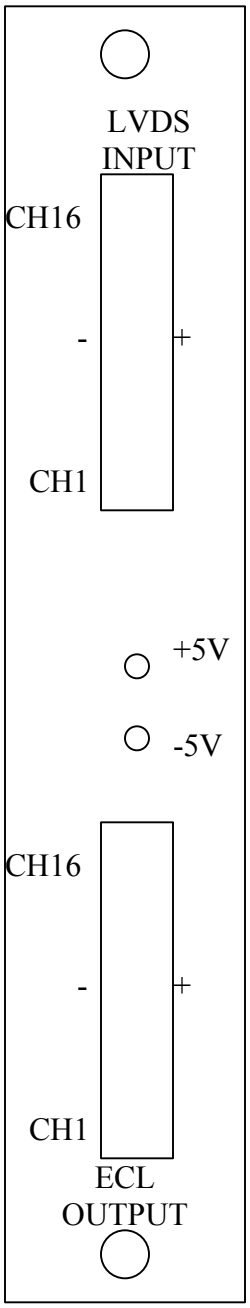


16 Channels
LVDS to ECL Converter

Introduction:

The 16 Channels LVDS to ECL converter is a single width NIM module. It receives 16 pairs of differential LVDS signals and outputs them in ECL voltage levels. The front panel view is show in the figure on the left (not to scale). Both input and output headers are 0.1 in (2.54 mm) spacing 34-pin ones with keying and ejectors. The ECL output connector pin out is designed to fit standard LeCory ECLine modules such as 3377 chamber TDC directly. The LVDS input pins use similar assignment as the ECL output.

INPUT:

Number of inputs: 16 (The top header pair, i.e., the 17th pair is unused.)
Input Signal Level: LVDS.
Input Termination: 100 Ω across + and – input pins.

OUTPUT:

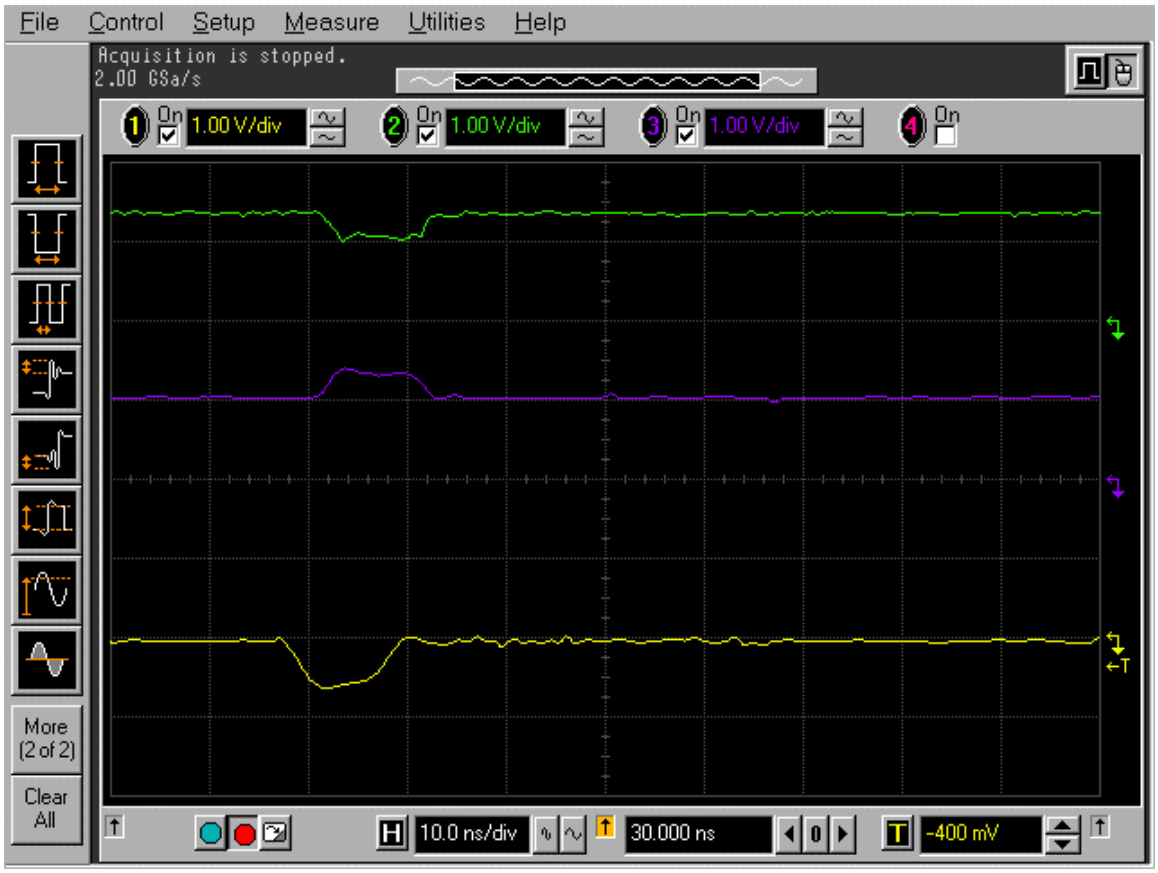
Number of outputs: 16 (The top header pair, i.e., the 17th pair is unused.)
Output Signal Level: ECL.
Output Pull down: 390 Ω to –5V on each pin.

POWER:

Internal Power: +5V and –5V, derived from +6V and –6V, respectively
LED: +5V and –5V
Power Requirement: 0.3A at +6V, 0.5A at –6V.

Test Scope Trace:

LVDS Input:



ECL Output:


File
Control
Setup
Measure
Utilities
Help
Acquisition is stopped.
2.00 GSa/s
1.00 V/div
1.00 V/div
1.00 V/div
More
(2 of 2)
Clear
All
10.0 ns/div
30.000 ns
-400 mV